

10

FIG. 1

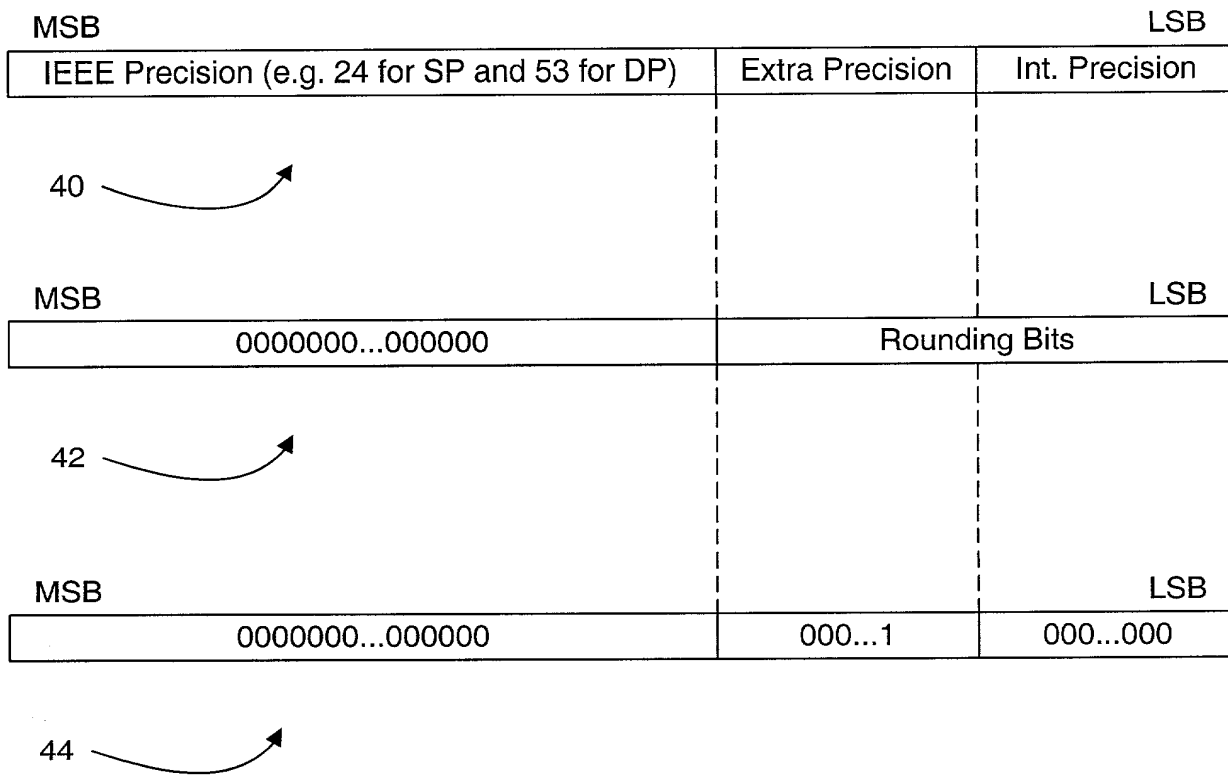


FIG. 2

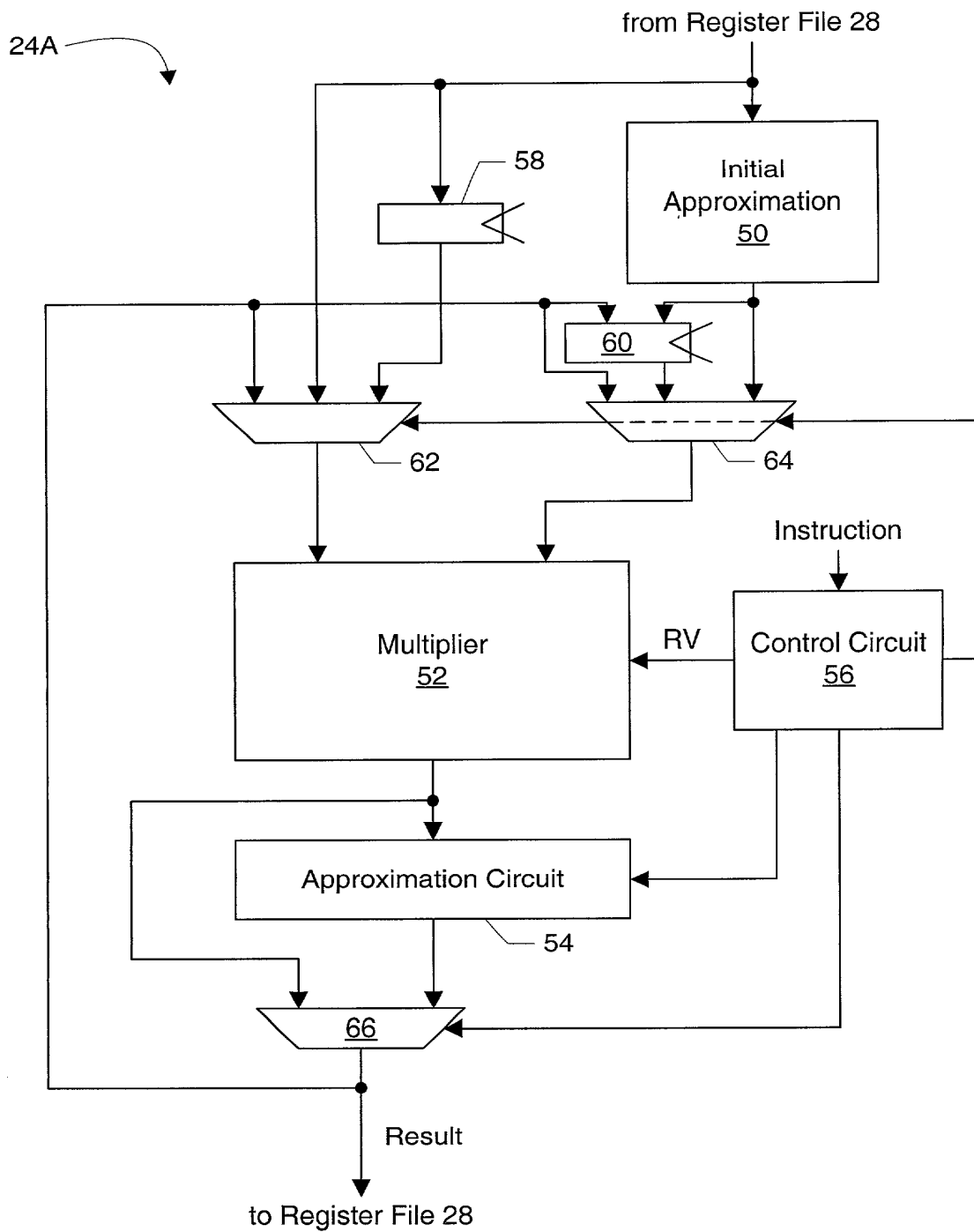


FIG. 3

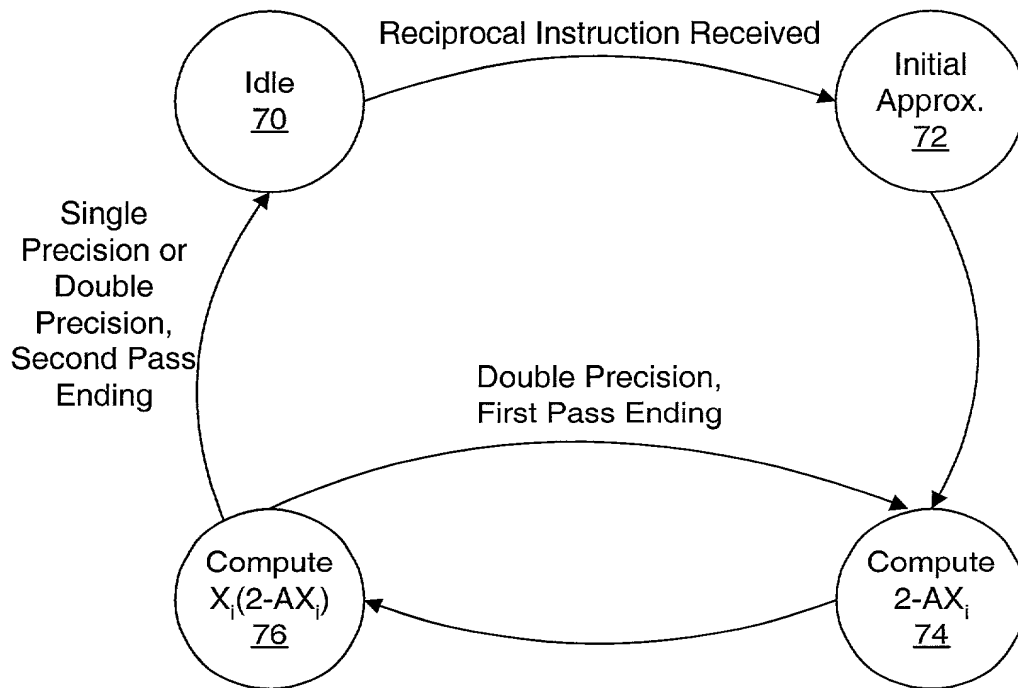


FIG. 4

<u>State</u>	<u>Operand Mux</u> <u>62</u>	<u>Operand</u> <u>Mux 64</u>	<u>Output Mux</u> <u>66</u>	<u>Rounding Vector</u>
Idle	--	--	--	--
Initial Approx.	--	--	--	--
Compute $2-AX_i$	Input Operand or Register	Approx. or Result	Approx. Circuit	Round to Nearest
Compute $X_i(2-AX_i)$	Result	Register	Multiplier	Correction Vector + Round to Nearest

FIG. 5

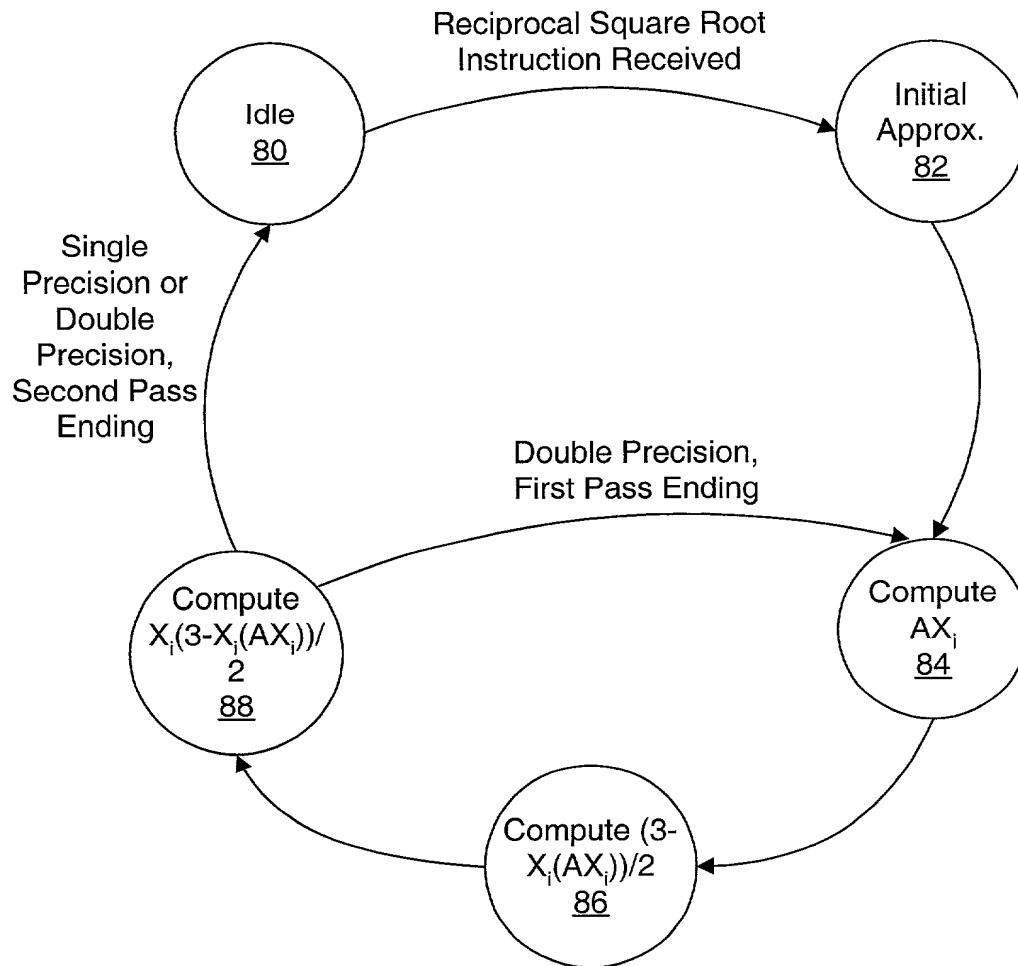


FIG. 6

<u>State</u>	<u>Operand Mux</u> <u>62</u>	<u>Operand</u> <u>Mux 64</u>	<u>Output Mux</u> <u>66</u>	<u>Rounding Vector</u>
Idle	--	--	--	--
Initial Approx.	--	--	--	--
Compute AX_i	Input Operand or Register	Approx. or Result	Multiplier	Round to Nearest
Compute $(3-X_i(AX_i))/2$	Result	Register	Approx. Circuit	Round to Nearest
Compute $X_i(3-X_i(AX_i))/2$	Result	Register	Multiplier	Correction Vector + Round to Nearest

FIG. 7

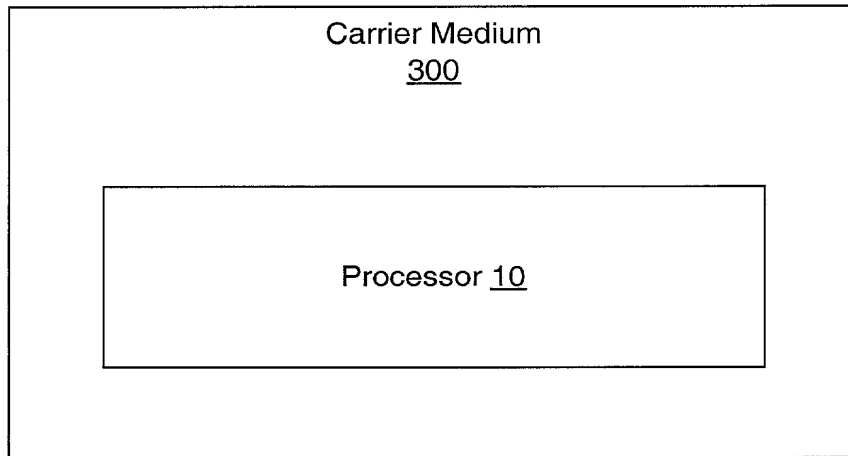


FIG. 8